

(b) Eligible preliminary engineering costs may include those incurred in selecting crossings to be improved, determining the type of improvement for each crossing, estimating the cost and preparing the required agreement.

(c) The written agreement between a State and a railroad shall contain as a minimum:

(1) Identification of each crossing location.

(2) Description of improvement and estimate of cost for each crossing location.

(3) Estimated schedule for completion of work at each location.

(d) Following programming, authorization and approval of the agreement under § 646.218(c), FHWA may authorize construction, including acquisition of warning device materials, with the condition that work at any particular location will not be undertaken until the proposed or executed State-railroad agreement under § 646.216(d)(2) is found satisfactory by FHWA and the final plans, specifications, and estimates are approved and with the condition that only material actually incorporated into the project will be eligible for Federal participation.

(e) Work programmed and authorized under this simplified procedure should include only that which can reasonably be expected to reach the construction stage within one year and be completed within two years after the initial authorization date.

§ 646.220 Alternate Federal-State procedure.

(a) On other than Interstate projects, an alternate procedure may be used, at the election of the State, for processing certain types of railroad-highway work. Under this procedure, the State highway agency will act in the relative position of FHWA for reviewing and approving projects.

(b) The scope of the State's approval authority under the alternate procedure includes all actions necessary to advance and complete the following types of railroad-highway work:

(1) All types of grade crossing improvements under § 646.206(a)(3).

(2) Minor adjustments to railroad facilities under § 646.206(b).

(c) The following types of work are to be reviewed and approved in the normal manner, as prescribed elsewhere in this subpart.

(1) All projects under § 646.206(a) (1) and (2).

(2) Major adjustments to railroad facilities under § 646.206(b).

(d) Any State wishing to adopt the alternate procedure may file a formal application for approval by FHWA. The application must include the following:

(1) The State's written policies and procedures for administering and processing Federal-aid railroad-highway work, which make adequate provisions with respect to all of the following:

(i) Compliance with the provisions of title 23 U.S.C., title 23 CFR, and other applicable Federal laws and Executive Orders.

(ii) Compliance with this subpart and 23 CFR part 140, subpart I and 23 CFR part 172.

(iii) For grade crossing safety improvements, compliance with the requirements of 23 CFR part 924.

(2) A statement signed by the Chief Administrative Officer of the State highway agency certifying that:

(i) The work will be done in accordance with the applicable provisions of the State's policies and procedures submitted under § 646.220(d)(1), and

(ii) Reimbursement will be requested in only those costs properly attributable to the highway construction and eligible for Federal fund participation.

(e) When FHWA has approved the alternate procedure, it may authorize the State to proceed in accordance with the State's certification, subject to the following conditions:

(1) The work has been programmed.

(2) The State submits in writing a request for such authorization which shall include a list of the improvements or adjustments to be processed under the alternate procedure, along with the best available estimate of cost.

(f) The FHWA Regional Administrator may suspend approval of the certified procedure, where FHWA reviews disclose noncompliance with the certification. Federal-aid funds will not be

eligible to participate in costs that do not qualify under § 646.220(d)(1).

[40 FR 16059, Apr. 9, 1975; 40 FR 29712, July 15, 1975; 40 FR 31211, July 25, 1975; 42 FR 30835, June 17, 1977, as amended at 45 FR 20795, Mar. 31, 1980]

APPENDIX TO SUBPART B OF PART 646—
HORIZONTAL AND VERTICAL CLEAR-
ANCE PROVISIONS FOR OVERPASS AND
UNDERPASS STRUCTURES

The following implements provisions of 23 CFR 646.212(a)(3).

a. *Lateral Geometrics*

A cross section with a horizontal distance of 6.1 meters, measured at right angles from the centerline of track at the top of rails, to the face of the embankment slope, may be approved. The 6.1-meters distance may be increased at individual structure locations as appropriate to provide for drainage if justified by a hydraulic analysis or to allow adequate room to accommodate special conditions, such as where heavy and drifting snow is a problem. The railroad must demonstrate that this is its normal practice to address these special conditions in the manner proposed. Additionally, this distance may also be increased up to 2.5 meters as may be necessary for off-track maintenance equipment, provided adequate horizontal clearance is not available in adjacent spans and where justified by the presence of an existing maintenance road or by evidence of future need for such equipment. All piers should be placed at least 2.8 meters horizontally from the centerline of the track and preferably beyond the drainage ditch. For multiple track facilities, all dimensions apply to the centerline of the outside track.

Any increase above the 6.1-meters horizontal clearance distance must be required by specific site conditions and be justified by the railroad to the satisfaction of the State highway agency (SHA) and the FHWA.

b. *Vertical Clearance*

A vertical clearance of 7.1 meters above the top of rails, which includes an allowance for future ballasting of the railroad tracks, may be approved. Vertical clearance greater than 7.1 meters may be approved when the State regulatory agency having jurisdiction over such matters requires a vertical clearance in excess of 7.1 meters or on a site by site basis where justified by the railroad to the satisfaction of the SHA and the FHWA. A railroad's justification for increased vertical clearance should be based on an analysis of engineering, operational and/or economic conditions at a specific structure location.

Federal-aid highway funds are also eligible to participate in the cost of providing vertical clearance greater than 7.1 meters where a railroad establishes to the satisfaction of a SHA and the FHWA that it has a

definite formal plan for electrification of its rail system where the proposed grade separation project is located. The plan must cover a logical independent segment of the rail system and be approved by the railroad's corporate headquarters. For 25 kv line, a vertical clearance of 7.4 meters may be approved. For 50 kv line, a vertical clearance of 8.0 meters may be approved.

A railroad's justification to support its plan for electrification shall include maps and plans or drawings showing those lines to be electrified; actions taken by its corporate headquarters committing it to electrification including a proposed schedule; and actions initiated or completed to date implementing its electrification plan such as a showing of the amounts of funds and identification of structures, if any, where the railroad has expended its own funds to provide added clearance for the proposed electrification. If available, the railroad's justification should include information on its contemplated treatment of existing grade separations along the section of its rail system proposed for electrification.

The cost of reconstructing or modifying any existing railroad-highway grade separation structures solely to accommodate electrification will not be eligible for Federal-aid highway fund participation.

c. *Railroad Structure Width*

Two and eight tenths meters of structure width outside of the centerline of the outside tracks may be approved for a structure carrying railroad tracks. Greater structure width may be approved when in accordance with standards established and used by the affected railroad in its normal practice.

In order to maintain continuity of off-track equipment roadways at structures carrying tracks over limited access highways, consideration should be given at the preliminary design stage to the feasibility of using public road crossings for this purpose. Where not feasible, an additional structure width of 2.5 meters may be approved if designed for off-track equipment only.

[53 FR 32218, Aug. 24, 1988, as amended at 62 FR 45328, Aug. 27, 1997]

**PART 650—BRIDGES, STRUCTURES,
AND HYDRAULICS**

**Subpart A—Location and Hydraulic Design
of Encroachments on Flood Plains**

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